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## **CLAIMS**

- 1. Optical fiber cable (1) comprising:
  - a central strength member (2);
  - a number of tubes (3) containing optical fibers (4); and
  - a protective outer jacket (6);

## characterized in that

- the filling coefficient of optical fibers in at least one loose tube is
  ≥ 45%;
- the tubes (3) comprise a material having an elasticity modulus ≥
  700 MPa; and
- the optical fibers (4) have a microbending sensitivity ≤ 4,0 dB· km<sup>-1</sup> / g· mm<sup>-1</sup> in a temperature range from about -30 °C to +60 °C at about 1550 nm.
- Optical fiber cable (1) according to claim 1, wherein the optical fibers
  (4) are single mode, SM, or single mode reduced, SM-R, fibers.
- 3. Optical fiber cable (1) according to claim 1 or 2, wherein the tubes(3) comprise a material having an elasticity modulus ≥ 800 MPa.
- 4. Optical fiber cable (1) according to claim 1 or 2, wherein the tubes(3) comprise a material having an elasticity modulus ≥ 1000 MPa.
- 5. Optical fiber cable (1) according to any of claims 1-4, wherein the optical fibers (4) comprise an inner coating layer (4P) of a material having an elastic modulus lower than about 200 MPa when measured at -30°C and lower than about 2 MPa when measured at a temperature from about +20°C to +60°C.
- 6. Optical fiber cable (1) according to claim 5, wherein the optical fibers (4) comprise an inner coating layer (4P) of a material having an elastic modulus lower than about 80 MPa when measured at about -30°C.

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- 7. Optical fiber cable (1) according to claim 5, wherein the optical fibers (4) comprise an inner coating layer (4P) of a material having an elastic modulus between about 20 and 60 MPa when measured at about -30°C.
- 8. Optical fiber cable (1) according to any of claims 1-7, wherein the optical fibers (4) comprise a mass colored outer coating layer (4S).
- Optical fiber cable (1) according to any of claims 1-8, wherein the filling coefficient of optical fibers in at least one loose tube is ≥ 50%.
- 10. Optical fiber cable (1) according to any of claims 1-9, wherein the tubes (3) are made of a material selected from the group consisting of: polybuthylenthereftalate, high density polythene, medium density polythene and low density polytene.
- 11. Optical fiber cable (1) according to any of claims 1-10, wherein the tubes (3) have an inner diameter ≤ about 1,25 mm.
- 12. Optical fiber cable (1) according to any of claims 1-10, wherein the tubes (3) have an inner diameter ≤ about 1,20 mm.
  - 13. Optical fiber cable (1) according to any of claims 1-12, wherein the outer diameter of colored optical fibers is about 0,245 mm.
  - 14. Optical fiber cable (1) according to any of claims 1-13, wherein the external cable diameter is ≤ about 7,0 mm with a number of optical fibers ≥ 72.
  - 15. Optical fiber cable (1) according to any of claims 1-13, wherein the external cable diameter is ≤ about 6,0 mm with a number of optical fibers ≥ 72.
- 25 16. Optical fiber cable (1) according to any of claims 1-15, wherein the outer jacket (6) is made of a material selected from the group consisting of: Polyamide 12, high density polythene, medium density polythene and low density polytene.

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17. Optical fiber cable (1) according to any of claims 1-15, wherein the outer jacket (6) is made of a graphite-charged Polyamide 12 compound.